

WHAT IS CLAIMED IS:

- 1 1. A method of screening drug candidates comprising:
- 2 a) providing a cell that expresses an expression profile gene selected from the
- 3 group consisting of an expression profile gene set forth in Table 1 or Table 2 or fragment
- 4 thereof;
- 5 b) adding a drug candidate to said cell; and
- 6 c) determining the effect of said drug candidate on the expression of said
- 7 expression profile gene.
- 1 2. A method according to claim 1 wherein said determining comprises
- 2 comparing the level of expression in the absence of said drug candidate to the level of
- 3 expression in the presence of said drug candidate.
- 1 3. A method of screening for a bioactive agent capable of binding to a
- 2 colorectal cancer modulator protein (colorectal cancer modulator protein), wherein said
- 3 colorectal cancer modulator protein is encoded by a nucleic acid selected from the group
- 4 consisting of a nucleic acid of Table 1 or Table 2 or a fragment thereof, said method
- 5 comprising:
- 6 a) combining said colorectal cancer modulator protein and a candidate
- 7 bioactive agent; and
- 8 b) determining the binding of said candidate agent to said colorectal cancer
- 9 modulator protein.
- 1 4. A method for screening for a bioactive agent capable of modulating the
- 2 activity of a colorectal cancer modulator protein, wherein said colorectal cancer modulator
- 3 protein is encoded by a nucleic acid selected from the group consisting of a nucleic acid of
- 4 Table 1 or Table 2 or a fragment thereof, said method comprising:
- 5 a) combining said colorectal cancer modulator protein and a candidate
- 6 bioactive agent; and

b) determining the effect of said candidate agent on the bioactivity of said colorectal cancer modulator protein.

5. A method of evaluating the effect of a candidate colorectal cancer drug comprising:

- a) administering said drug to a patient;
- b) removing a cell sample from said patient; and
- c) determining the expression of a gene selected from the group consisting of a nucleic acid of Table 1 or Table 2.

6. A method according to claim 5 further comprising comparing said expression profile to an expression profile of a healthy individual.

7. A method of diagnosing colorectal cancer comprising:

- a) determining the expression of one or more genes selected from the group consisting of a nucleic acid of Table 1 or Table 2 or a fragment thereof or a polypeptide encoded thereby in a first tissue type of a first individual; and
- b) comparing said expression of said gene(s) from a second normal tissue type from said first individual or a second unaffected individual;

wherein a difference in said expression indicates that the first individual has colorectal cancer.

8. A method for screening for a bioactive agent capable of interfering with the binding of a colorectal cancer modulator protein (colorectal cancer modulator protein) or a fragment thereof and an antibody which binds to said colorectal cancer modulator protein or fragment thereof, said method comprising:

- a) combining a colorectal cancer modulator protein or fragment thereof, a candidate bioactive agent and an antibody which binds to said colorectal cancer modulator protein or fragment thereof; and
- b) determining the binding of said colorectal cancer modulator protein or fragment thereof and said antibody.

1 9. A method for inhibiting the activity of a colorectal cancer modulator
2 protein (colorectal cancer modulator protein), wherein said colorectal cancer modulator
3 protein is encoded by a nucleic acid selected from the group consisting of a nucleic acid of
4 Table 1 or Table 2 or a fragment thereof, said method comprising binding an inhibitor to said
5 colorectal cancer modulator protein.

1 10. A method according to claim 9 wherein said inhibitor is an antibody.

1 11. A method of treating colorectal cancer comprising administering to a
2 patient an inhibitor of a colorectal cancer modulator protein, wherein said colorectal cancer
3 modulator protein is encoded by a nucleic acid selected from the group consisting of a
4 nucleic acid of Table 1 or Table 2 or a fragment thereof.

1 12. A method according to claim 11 wherein said inhibitor is an antibody.

1 13. A method of neutralizing the effect of a colorectal cancer modulator
2 protein, or a fragment thereof, comprising contacting an agent specific for said protein with
3 said protein in an amount sufficient to effect neutralization.

1 14. A method for localizing a therapeutic moiety to colorectal cancer tissue
2 comprising exposing said tissue to an antibody to a colorectal cancer modulator protein or
3 fragment thereof conjugated to said therapeutic moiety.

1 15. The method of Claim 14, wherein said therapeutic moiety is a cytotoxic
2 agent.

1 16. The method of Claim 14, wherein said therapeutic moiety is a
2 radioisotope.

1 17. A method for inhibiting colorectal cancer in a cell, wherein said method
2 comprises administering to a cell a composition comprising antisense molecules to a nucleic
3 acid of Table 1 or Table 2.

1 18. An antibody which specifically binds to a protein encoded by a nucleic
2 acid of Table 1 or Table 2 or a fragment thereof.

1 19. The antibody of Claim 18, wherein said antibody is a monoclonal
2 antibody.

1 20. The antibody of Claim 18, wherein said antibody is a humanized
2 antibody.

1 21. The antibody of Claim 18, wherein said antibody is an antibody fragment.

1 22. A biochip comprising one or more nucleic acid segments selected from
2 the group consisting of a nucleic acid of Table 1 or Table 2 or a fragment thereof, wherein
3 said biochip comprises fewer than 1000 nucleic acid probes.

1 23. A nucleic acid having a sequence at least 95% homologous to a sequence
2 of a nucleic acid of Table 1 or Table 2 or its complement.

1 24. A nucleic acid which hybridizes under high stringency to a nucleic acid of
2 Table 1 or Table 2 or its complement.

1 25. A polypeptide encoded by the nucleic acid of Claim 23 or 24.

1 26. A method of eliciting an immune response in an individual, said method
2 comprising administering to said individual a composition comprising the polypeptide of
3 Claim 25 or a fragment thereof.

1 27. A method of eliciting an immune response in an individual, said method
2 comprising administering to said individual a composition comprising a nucleic acid
3 comprising a sequence of a nucleic acid of Table 1 or Table 2 or a fragment thereof.

1 28. A method of determining the prognosis of an individual with colorectal
2 cancer comprising:

3 a) determining the expression of one or more genes selected from the group
4 consisting of a nucleic acid of Table 1 or Table 2 or a fragment thereof in a first tissue type of
5 a first individual; and

6 b) comparing said expression of said gene(s) from a second normal tissue type
7 from said first individual or a second unaffected individual;

8 wherein a substantial difference in said expression indicates a poor prognosis.

1 29. A method of treating colorectal cancer comprising administering to an
2 individual having colorectal cancer an antibody to a colorectal cancer modulator protein or
3 fragment thereof conjugated to a therapeutic moiety.

1 30. The method of Claim 29, wherein said therapeutic moiety is a cytotoxic
2 agent.

1 31. The method of Claim 29, wherein said therapeutic moiety is a
2 radioisotope.